

### **Remarks**

Claims 1-4, 17, and 24-28 are currently pending in the instant application. The specification has been amended as described below to provide cross-reference information to related applications. In addition, Claims 18-19, 21, and 23 have been cancelled. Claim 1 has also been amended such that R<sup>4</sup> may be (C<sub>1</sub>-C<sub>4</sub> alkyl)sulfonyl, (C<sub>3</sub>-C<sub>6</sub> cycloalkyl)sulfonyl or (C<sub>1</sub>-C<sub>4</sub> alkyl)<sub>2</sub>N-sulfonyl. Basis in the specification may be found at least on pages 11-12, paragraphs dd) -jj) describing preferences for R<sup>4</sup>. Typographical errors in the punctuation of Claim 1, specifically in the definition of R<sup>4</sup> have also been corrected. Additionally, Claim 28 describing the use of compounds of Claim 1 for the inhibiting lung melanoma metastasis has been added, the basis for which may be found at least on page 15, line 8, and page 109, lines 24-29. As such, Applicants assert that there is no issue of new matter with respect to the amendments describe above and the addition of Claim 28, and respectfully request entry and allowance thereof. Applicants provide additional responses to rejections, objections, and restrictions made by the Examiner in the Office Action dated February 22, 2007 below.

#### **1. Unity Requirement**

The Examiner has asserted that the present application contains multiple inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

The Examiner submitted the following groups of inventions asserting that they are not so linked as to form a single inventive concept under PCT rule 13.1:

Group I: Claims 1-4, 17 and 24-27 drawn to compound of formula I wherein all the variables are as defined.

Group II: Claims 18-21, drawn to a method of inhibiting growth of a susceptible neoplasm comprising administering a compound of formula 1.

Group III: Claims 18-19 and 23, drawn to a method of treating rheumatoid arthritis comprising administering a compound of formula 1.

The Examiner asserts that unity of invention is lacking under 37 CFR 1.475(b), which states:

(b) An international or a national stage application containing claims to different categories of invention will be considered to have unity of invention if the claims are drawn only to one of the following combinations of categories:

- (1) A product and a process specially adapted for the manufacture of said product; or
- (2) A product and process of use of said product; or
- (3) A product, a process specially adapted for the manufacture of the said product, and a use of the said product; or
- (4) A process and an apparatus or means specifically designed for carrying out the said process; or
- (5) A product, a process specially adapted for the manufacture of the said product, and an apparatus or means specifically designed for carrying out the said process.

The present application is an international application which has entered the U.S. national stage under 35 U.S.C. §351. Restriction is therefore governed by unity of invention. MPEP 1893.03(d).

Applicants assert that according to the Examiner's delineated groups, new Claim 28 would be appropriately placed in Group II as a method of inhibiting metastasis of a specific cancer. In addition, Applicants assert that the method claim, new Claim 28, together with the remaining pending claims, Claims 1-4, 17, and 24-27, are appropriately considered one invention. Applicants direct the Examiner's attention to PCT Annex B, Part 1(I), which refers to particular examples giving guidance on how unity of invention principles may be interpreted in the PCT International Search and Preliminary Examination Guidelines (PCT ISPE Guidelines). Specifically, Applicants direct the Examiner's attention to PCT ISPE Guidelines, Part III, Chapter 10, Paragraph 10.21 on page 80, a copy of which is provided for the Examiner's convenience. This section of the cited reference provides examples concerning unity of invention under Rule 13.1/13.2. Example 1 clearly states that unity of invention exists between a claim to a method of manufacturing chemical "substance X", a claim to "substance X" and a claim to the use of "substance X" because these claims possess a common special technical feature, i.e., "substance X". This is the same scenario presented by Applicants' Claims 1 and 28. As such, under Rule 13.2, there is unity of invention and the claims must be examined together.

In view of these points, the pending claims, Claims 1-4, 17, and 24-28, meet the criteria of unity of invention under Rules 13.1/13.2. Applicants respectfully request that the restriction requirement be withdrawn from the present application.

In the event that the Examiner does not withdraw the restriction requirement, and in order to be responsive, Applicants elect Group I with traverse in view of the above-stated arguments.

## **2. Priority**

Applicants claim the benefit of prior filed Application No. 60/421,939. As the Examiner points out, however, Claims 1 and 17 contain subject matter not presented in U.S. Provisional Application No. 60/421,939, filed on 10/28/2002. Applicants assert, however, that all claims are entitled to the benefit of International Application No. PCT/US03/19890, filed on 07/31/2003, as the disclosures of the invention in above-referenced International Application and the instant application are sufficient to comply with 35 U.S.C. § 112. Accordingly, all presently pending claims are entitled the benefit of the filing date of international Application No. PCT/US03/19890, filed on 07/31/2003.

## **3. Oath/Declaration**

37 CFR § 1.63 (b)(1) requires that an oath or declaration “[i]dentify the application to which it is directed.” The Examiner asserts that a new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required because the title of the invention does not correspond to what is set forth in the oath. Foremost Applicants notably indicate that 37 CFR §1.63 (b)(1) does not specify the *manner* in which the application must be identified, and Applicants have in the declaration provided identification of the application by the correct application number and filing date. Moreover, Applicants respectfully assert that at the time the declaration was executed, the title of the invention did correspond to that set forth in the declaration. Applicants have provided for the Examiner a copy of the PCT Application cover letter and first page of the PCT Request, both of which indicate the title of the present application, as evidenced by Applicants’ docket number X-13980, to be “Kinase Inhibitors.” Applicants additionally invite the Examiner to review the PCT International Search Report (Search Report) for the instant application, a copy of which as been provided for the Examiner’s convenience. As noted on the Search Report cover sheet, this report was received November 13, 2003. In addition, on page 4 of the document provided, which is the first page of the Search Report, paragraph 4. indicates that the International Searching Authority established the text of the title to be “Benzimidazoles and Benzothiazoles as Inhibitors of MAP Kinase.” Applicants further invite the Examiner to review the execution dates provided on the declaration, the latest of which is September 23<sup>rd</sup>, 2003. A copy of the declaration is included for the Examiner’s convenience. Thus the title of the present application was “Kinase Inhibitors” at the time the declaration was executed.

Because the declaration was correct at the time of execution, and furthermore identifies the application by the correct application number and filing date, Applicants respectfully assert that the declaration as submitted complies with 37 CFR §1.63 and no new oath or declaration under 37 CFR 1.67(a) is required.

#### **4. Objections: Content of Specification**

The Examiner has indicated that the application should contain cross-references to related applications. Applicants have amended to the specification to include a statement indicating that this application is a national phase entry, pursuant to 35 U.S.C. 371, of PCT/US2003/19890 which claims the benefit of European provisional patent application 2380178.0 and United States provisional patent application serial number 60/421,939. Applicants respectfully reiterate their request for entry of this amendment.

#### **5. Claim Rejections: 35 USC 103(a) – Rejection 1**

The Examiner has rejected Claim 1 as obvious under 35 USC 103(a) in view of Kai *et al.* and separately in view of Gaster *et al.*. Applicants respectfully submit that the claims as currently amended are not obvious in view of these references.

Graham v. John Deere Co., 383 U.S. 1, 148 USPQ 459 (1966) describes the factual inquiries that applicable in determining obviousness and they are as follows:

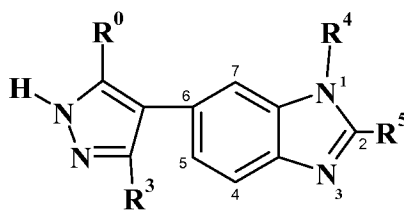
1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Applicants discuss each factor below as it relates to the instant application and the above stated references.

##### *1. Determining the scope and contents of the prior art.*

###### *a. Kai et al.*

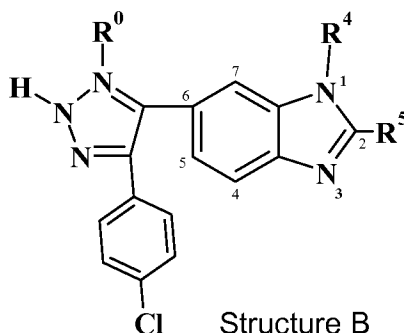
On Page 10 of Official Action dated February 22, 2007, the Examiner lists that Kai *et al.* teaches compounds of the formula depicted in Structure A below, wherein R<sup>0</sup> is H, R<sup>3</sup> is optionally substituted phenyl and thienyl, R<sup>4</sup> is methyl, ethyl or isopropyl, and R<sup>5</sup> is H.



Structure A  
Kai et al.

b. Gaster et al.

On Page 13 of Official Action dated February 22, 2007, the Examiner lists that Gaster *et al.* teaches compounds of the formula depicted in Structure B below, wherein R<sup>0</sup> is H, R<sup>3</sup> is phenyl substituted halo, X is NR<sup>4</sup>, R<sup>4</sup> is methyl, and R<sup>5</sup> is H.



Structure B  
Gaster et al.

2. Ascertainment of the difference between the prior art and the claims

a. Kai et al.

The Examiner has asserted that the difference between the prior art of Kai *et al.* and the instantly claimed compounds is that the compounds of Kai *et al.* are directed toward tertiary amine compounds rather than the instantly-claimed secondary amine compounds, via substitution of the nitrogen in the first position on the benzimidazole moiety. Moreover, the Examiner cites Ex parte Bluestone, 135 USPQ 199, for the notion that secondary and tertiary amines are interchangeable. However, in view of Claim 1 as amended, Applicants, respectfully disagree. Kai *et al.* teaches tertiary amines wherein 6-pyrazolo-benzimidazole compounds wherein the nitrogen on the first position of the benzimidazole moiety is C<sub>1</sub>-C<sub>3</sub>alkyl-substituted, whereas the instant invention, as currently amended, is drawn to compounds wherein R<sup>4</sup> is (C<sub>1</sub>-C<sub>4</sub> alkyl)sulfonyl, (C<sub>3</sub>-C<sub>6</sub> cycloalkyl)sulfonyl, or (C<sub>1</sub>-C<sub>4</sub> alkyl)<sub>2</sub>N-sulfonyl.

b. Gaster *et al.*

Similarly, the Examiner has asserted that the difference between the prior art of Gaster *et al.* and the instantly claimed compounds is that the compounds of Gaster *et al.* are directed toward tertiary amine compounds rather than the instantly-claimed secondary amine compounds, via substitution of the nitrogen in the first position on the benzoimidazole moiety, again citing Ex parte Bluestone, 135 USPQ 199, to indicate secondary and tertiary amines are interchangeable. The Applicants, however, respectfully disagree. Gaster *et al.* teaches tertiary amines wherein 6-triazolyl-benzimidazole compounds wherein the nitrogen on the first position of the benzoimidazole moiety is methyl-substituted, whereas the instant invention, as currently amended, is drawn to compounds wherein R<sup>4</sup> is (C<sub>1</sub>-C<sub>4</sub> alkyl)sulfonyl, (C<sub>3</sub>-C<sub>6</sub> cycloalkyl)sulfonyl, or (C<sub>1</sub>-C<sub>4</sub> alkyl)<sub>2</sub>N-sulfonyl.

3. Lack of rationale and motivation for a Finding of Prima Facie Obviousness

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. MPEP §2143. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure. In re Vaeck, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

Further, a *prima facie* case of obviousness also requires a showing of "adequate support in the prior art" for the change in structure. Takeda Chem. Indus. v. Alphapharm Pty., Ltd., 2007 U.S. App. LEXIS 15349 (Fed. Cir. 2007) *citing* In re Grabiak, 769 F.2d 729, 731-32 (Fed. Cir. 1985). As such, "in cases involving new chemical compounds, it remains necessary to identify some reason that would have led a chemist to modify a known compound in a particular manner to establish *prima facie* obviousness of a new claimed compound." Takeda Chem. Indus. v. Alphapharm Pty., Ltd., 2007 U.S. App. LEXIS 15349, 12-13 (Fed. Cir. 2007)

a. No teaching, or suggestion to make the claimed compounds in view of Kai *et al.*

Applicants assert that there is no teaching or knowledge in the art to modify tertiary amines of Kai *et al.* to arrive at sulfonamides of Claim 1 as amended. The Examiner has not pointed to any art which indicates that C<sub>1</sub>-C<sub>3</sub>alkyl-substituted amines are interchangeable with

(C<sub>1</sub>-C<sub>4</sub> alkyl)sulfonyl, (C<sub>3</sub>-C<sub>6</sub> cycloalkyl)sulfonyl, or (C<sub>1</sub>-C<sub>4</sub> alkyl)<sub>2</sub>N-sulfonyl-substituted amines. In addition, it is not within the knowledge of one of ordinary skill in the chemical arts to replace a C<sub>1</sub>-C<sub>3</sub>alkyl substituent with (C<sub>1</sub>-C<sub>4</sub> alkyl)sulfonyl, (C<sub>3</sub>-C<sub>6</sub> cycloalkyl)sulfonyl, or (C<sub>1</sub>-C<sub>4</sub> alkyl)<sub>2</sub>N-sulfonyl, and even if present, such suggestion would not carry a reasonable expectation of producing additional compound useful for the same purposes.

b. No teaching, or suggestion to make the claimed compounds in view of Gaster *et al.*

Applicants assert that is no teaching, or knowledge in the art to modify tertiary amines of Gaster *et al.* to arrive at tertiary amines of Claim 1, as amended. The Examiner has not pointed to any art which indicates that methyl-substituted amines are interchangeable with (C<sub>1</sub>-C<sub>4</sub> alkyl)sulfonyl, (C<sub>3</sub>-C<sub>6</sub> cycloalkyl)sulfonyl, or (C<sub>1</sub>-C<sub>4</sub> alkyl)<sub>2</sub>N-sulfonyl-substituted compounds instantly claimed. In addition, it is not within the knowledge of one of ordinary skill in the chemical arts to replace a methyl substituent with (C<sub>1</sub>-C<sub>4</sub> alkyl)sulfonyl, (C<sub>3</sub>-C<sub>6</sub> cycloalkyl)sulfonyl, or (C<sub>1</sub>-C<sub>4</sub> alkyl)<sub>2</sub>N-sulfonyl, and even if present, such suggestion would not carry a reasonable expectation of producing additional compound useful for the same purposes.

In view of the above arguments and Claim 1 as amended, Applicants assert that the Claim 1 of the instant invention is not obvious in view Kai *et al.* under 35 U.S.C §103(a). In addition, Applicants assert that in view of the amended claims and arguments above, the compounds of the instant invention are not obvious in view of Gaster *et al.* under 35 U.S.C §103(a). Applicants respectfully request allowance of Claims 1 and 17.

## **7. Provisional Double Patenting**

The Examiner has provisionally rejected Claims 1-2 and 17 on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1—3 and 5 of co-pending Application No. 10/597,359. Applicants assert that a terminal disclaimer is premature as there are no issued patents. Similarly, a response arguing differences between claims of the instant application and claims of Application No. 10/597,359 is also premature since no claims of Application No. 10/597,359 have been allowed. Applicants respectfully request allowance of claims 1-2 and 17.

Applicants assert that Claims 1-4, 17, and 24-28 as amended meet the unity of invention requirement as they are drawn to one inventive concept. Additionally, all claims in the

pending application are entitled to the benefit of the filing date of international Application No. PCT/US03/19890, filed on 07/31/2003. Moreover, the declaration as filed is sufficient as it describes the application as required by 37 CFR §1.63. With respect to cross-referencing related applications in the specification, Applicants have amended the specification accordingly. Further, Applicants assert that the pending claims as amended are not obvious in view of the art discussed above. Lastly, Applicants assert that a terminal disclaimer is premature in response to the provisional double patenting rejection, as no patent has been issued.

Applicants respectfully request admittance of the amendments to the specification and claims described herein. Further, applicants respectfully request allowance of pending Claims 1-4, 17, and 24-28 in view of the arguments above. If the Examiner has any questions, or would like to discuss any matters in connection with this application, she is invited to contact the undersigned at (317) 651-1266.

Please charge any fees or credit any overpayment in connection with this application which may be required by this or any related paper to Deposit Account No. 05-0840.

Respectfully submitted,

/Tonya L. Combs/

Tonya L. Combs  
Attorney for Applicants  
Registration No. 57,909  
Phone: 317-651-1266

Eli Lilly and Company  
Patent Division  
P.O. Box 6288  
Indianapolis, Indiana 46206-6288

August 21, 2007

# DECLARATION FOR UTILITY OR DESIGN PATENT APPLICATION

Attorney Docket Number	X-13980
First Named Inventor	BONJOUKLIAN, Rosanne
<b>COMPLETE IF KNOWN</b>	
Application Number	
Filing Date	
Group Art Unit	
Examiner Name	

☒ Declaration Submitted with Initial Filing  
☐ Declaration Submitted after Initial Filing

As a below named inventor, I hereby declare that:

My residence, post office address, and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

**KINASE INHIBITORS**

the specification of which  
☐ is attached hereto

OR

☒ was filed on (MM/DD/YYYY) July 31, 2003 as United States Application Number or PCT International

Application Number PCT/US03/19890 and was amended on (MM/DD/YYYY)  (if applicable).

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment specifically referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in Title 37 Code of Federal Regulations, § 1.56.

I hereby claim foreign priority benefits under Title 35, United States Code § 119(a)-(d) or § 365(b) of any foreign application(s) for patent or inventor's certificate, or § 365(a) of any PCT international application which designated at least one country other than the United States of America, listed below and have also identified below, by checking the box, any foreign application for patent or inventor's certificate, or of any PCT international application having a filing date before that of the application on which priority is claimed.

Prior Foreign Application Number(s)	Country	Foreign Filing Date (MM/DD/YYYY)	Priority Not Claimed	Certified Copy Attached	
				YES	NO
02380178.0	GB	08/09/2002	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

☐ Additional foreign application numbers are listed on a supplemental priority sheet attached hereto:

I hereby claim the benefit under Title 35, United States Code § 119(e) of any United States provisional applications(s) listed below.

Application Number(s)	Filing Date (MM/DD/YYYY)	<input type="checkbox"/> Additional provisional application numbers are listed on a supplemental priority sheet attached hereto.
60/421,939	10/28/2002	

**DECLARATION**

I hereby claim the benefit under Title 35, United States Code §120 of any United States application(s), or § 365(c) of any PCT international application designating the United States of America, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT international application in the manner provided by the first paragraph of Title 35, United States Code § 112, I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations § 1.56 which became available between the filing date of the prior application and the national or PCT international filing date of this application.

U.S. Parent Application Number	PCT Parent Number	Parent Filing Date (MM/DD/YYYY)	Parent Patent Number (if applicable)

☐ Additional U.S. or PCT international application numbers are listed on a supplemental priority sheet attached hereto.

As a named inventor, I hereby appoint the following registered practitioner(s) to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith:

Attorney Name	Reg. No.
Arvie J. Anderson	45,263
Lynn D. Apeigren	45,341
Robert A. Armitage	27,417
Brian P. Barnett	38,597
Michael T. Bates	34,121
Roger S. Benjamin	27,025
Gary M. Birch	48,881
William R. Boudreaux	35,796
Steven P. Caltrider	38,467
Paul R. Cantrell	38,470
John Cleveland	50,697
Charles E. Cohen	34,565
Donald L. Cornegio	30,741
Gregory A. Cox	47,504
Paula K. Davis	47,517
John C. Demeter	30,167
Manisha A. Desai	43,585
Paul J. Gaylo	36,808
Caren D. Geppert	P54,117
Francis O. Ginh	44,712
Amy E. Hamilton	33,894
Danica Hostettler	51,820
Thomas E. Jackson	33,064
Soonhee Jang	44,802
Gerald P. Keleher	43,707
James J. Kelley	41,888
Paul J. Koivunemi	31,533
Thomas LaGrandeur	51,026

Attorney Name	Reg. No.
Robert E. Lee	27,919
James P. Leeds	35,241
Nelsen L. Lentz	38,537
Elizabeth A. McGraw	44,646
Douglas K. Norman	33,267
Arlene Palmberg	40,422
Thomas G. Plant	35,784
Edward Prein	37,212
Grant E. Reed	41,264
James J. Sales	33,773
Michael J. Sayles	32,295
David M. Stemerick	40,187
Mark J. Stewart	43,936
Robert D. Titus	40,206
Robert C. Tucker	45,165
Tina M. Tucker	47,145
MaChari Vondran-Jones	36,711
Gilbert T. Voy	43,972
Thomas D. Webster	39,872
Lawrence T. Welch	29,487
Alexander Wilson	45,782
Mark A. Winter	53,782
MaryAnn Wiskerchen	45,511
Dan L. Wood	48,613

☐ Additional registered practitioner(s) named on a supplemental sheet attached hereto.

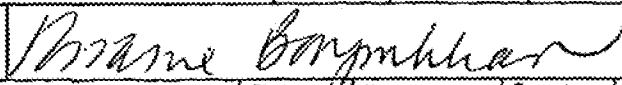
Direct all correspondence to:

Name **ELI LILLY AND COMPANY**  
 Address **ATTN: Robert D. Titus**  
 Address **Patent Division, P.O. Box 6288**  
 City **INDIANAPOLIS** State **INDIANA** ZIP **46206-6288**  
 Country **US** Telephone **(317) 277-3729** Fax **(317) 276-3861**

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Name of Sole or First Inventor:

☐ A Petition has been filed for this unsigned inventor

Given Name **Rosanne** Middle Name  Family Name **Bonjouklian** Suffix **e.g. Jr.**  
 Inventor's Signature  Date **4-2-03**  
 Residence: City **Zionsville** State **IN** Country **US** Citizenship **US**  
 Address **318 Dominion Drive**  
 Post Office Address **SAME AS ABOVE**  
 City **Zionsville** State **IN** Zip **46077** Country **US**

Additional inventors are being named on supplement sheet(s) attached hereto.

☒

**DECLARATION**

Name of Additional Joint Inventor, if any:		<input type="checkbox"/> A Petition has been filed for this unsigned inventor					
Given Name	Jose	Middle Name	Eugenio	Family Name	De Diego Gomez	Suffix e.g. Jr.	
Inventor's Signature						Date	
Residence: City	Madrid	State		Country	ES	Citizenship	ES
Address	C/Omega 42, 1°C						
Post Office Address	SAME AS ABOVE						
City	Madrid	State		Postal Code	28032	Country	ES

Name of Additional Joint Inventor, if any:		<input type="checkbox"/> A Petition has been filed for this unsigned inventor					
Given Name	Affonso	Middle Name		Family Name	De Dios	Suffix e.g. Jr.	
Inventor's Signature						Date	
Residence: City	Madrid	State		Country	ES	Citizenship	ES
Address	Bahia de Almeria 18B, 2A						
Post Office Address	SAME AS ABOVE						
City	Madrid	State		Postal Code	28042	Country	ES

Name of Additional Joint Inventor, if any:		<input type="checkbox"/> A Petition has been filed for this unsigned inventor					
Given Name	Chafiq	Middle Name	Hamdouchi	Family Name	Hamdouchi	Suffix e.g. Jr.	
Inventor's Signature	<i>Chafiq</i>					Date	4/07/03
Residence: City	Carmel	State	IN	Country	US	Citizenship	ES
Address	14469 Twin Oaks						
Post Office Address	SAME AS ABOVE						
City	Carmel	State	IN	Zip	46032	Country	US

Name of Additional Joint Inventor, if any:		<input type="checkbox"/> A Petition has been filed for this unsigned inventor					
Given Name	Tiecho	Middle Name		Family Name	LI	Suffix e.g. Jr.	
Inventor's Signature	<i>Tiecho</i>					Date	02/09/2002
Residence: City	Fishers	State	IN	Country	US	Citizenship	CA
Address	12853 Turnham Drive						
Post Office Address	SAME AS ABOVE						
City	Fishers	State	IN	Zip	46038	Country	US

**DECLARATION**

Name of Additional Joint Inventor, if any:		<input type="checkbox"/> A Petition has been filed for this unsigned inventor					
Given Name	Beatriz	Middle Name	Lopez	Family Name	De Uralde Garmendia	Suffix e.g. Jr.	
Inventor's Signature						Date	
Residence: City	Madrid	State		Country	ES	Citizenship	ES
Address	Calle Gil de Santibañez 6, 4°						
Post Office Address	SAME AS ABOVE						
City	Madrid	State		Postal Code	28001	Country	ES

Name of Additional Joint Inventor, if any:		<input type="checkbox"/> A Petition has been filed for this unsigned inventor					
Given Name	Michal	Middle Name		Family Name	Vieth	Suffix e.g. Jr.	
Inventor's Signature						Date	
Residence: City	Carmel	State	IN	Country	US	Citizenship	US
Address	13436 Shakamac Drive						
Post Office Address	SAME AS ABOVE						
City	Carmel	State	IN	Zip	46032	Country	US

Name of Additional Joint Inventor, if any:		<input type="checkbox"/> A Petition has been filed for this unsigned inventor					
Given Name	Jeremy	Middle Name	Schulenberg	Family Name	York	Suffix e.g. Jr.	
Inventor's Signature						Date	9/3/03
Residence: City	Indianapolis	State	IN	Country	US	Citizenship	US
Address	8866 Doral East Drive, Apartment F						
Post Office Address	SAME AS ABOVE						
City	Indianapolis	State	IN	Zip	46250	Country	US

Name of Additional Joint Inventor, if any:		<input type="checkbox"/> A Petition has been filed for this unsigned inventor					
Given Name	Robert	Middle Name	Dean	Family Name	Dally	Suffix e.g. Jr.	
Inventor's Signature						Date	09/02/03
Residence: City	Indianapolis	State	IN	Country	US	Citizenship	US
Address	9656 Loganberry Lane						
Post Office Address	SAME AS ABOVE						
City	Indianapolis	State	IN	Zip	46256	Country	US

**DECLARATION**

Name of Additional Joint Inventor, if any:		<input type="checkbox"/> A Petition has been filed for this unsigned inventor					
Given Name	Miriam	Middle Name	Filadelfa	Family Name	Del Prado Catalina	Suffix e.g. Jr.	
Inventor's Signature						Date	
Residence: City	Madrid	State		Country	ES	Citizenship	ES
Address	C/Antracita no 26 3ª						
Post Office Address	SAME AS ABOVE						
City	Madrid	State		Postal Code	28045	Country	ES

Name of Additional Joint Inventor, if any:		<input type="checkbox"/> A Petition has been filed for this unsigned inventor					
Given Name	Carlos	Middle Name		Family Name	Jaramillo Aguado	Suffix e.g. Jr.	
Inventor's Signature						Date	
Residence: City	Madrid	State		Country	ES	Citizenship	ES
Address	C/Arturo Soria 321						
Post Office Address	SAME AS ABOVE						
City	Madrid	State	ES	Postal Code	28033	Country	ES

Name of Additional Joint Inventor, if any:		<input type="checkbox"/> A Petition has been filed for this unsigned inventor					
Given Name	Luisa	Middle Name	Maria	Family Name	Martin-Cabrejas	Suffix e.g. Jr.	
Inventor's Signature						Date	
Residence: City	Madrid	State		Country	ES	Citizenship	ES
Address	Alejo Carpentier 17, 2ªC, Alcalá de Henares						
Post Office Address	SAME AS ABOVE						
City	Madrid	State		Postal Code	28806	Country	ES

Name of Additional Joint Inventor, if any:		<input type="checkbox"/> A Petition has been filed for this unsigned inventor					
Given Name	Carlos	Middle Name		Family Name	Montero Saigado	Suffix e.g. Jr.	
Inventor's Signature						Date	
Residence: City	Madrid	State		Country	ES	Citizenship	ES
Address	San Roque 19, 1ªD, Majadahonda						
Post Office Address	SAME AS ABOVE						
City	Madrid	State		Postal Code	28220	Country	ES

## DECLARATION

Name of Additional Joint Inventor, if any:		<input type="checkbox"/> A Petition has been filed for this unsigned inventor					
Given Name	Sheila	Middle Name		Family Name	Pleite Selgas	Suffix e.g. Jr.	
Inventor's Signature						Date	
Residence: City	Madrid	State		Country	ES	Citizenship	ES
Address		Avda Reina Victoria N°68 1ª esc. 5ºB					
Post Office Address		SAME AS ABOVE					
City	Madrid	State		Postal Code	28003	Country	ES

Name of Additional Joint Inventor, if any:		<input type="checkbox"/> A Petition has been filed for this unsigned inventor					
Given Name	Concepcion	Middle Name		Family Name	Sanchez-Martinez	Suffix e.g. Jr.	
Inventor's Signature						Date	
Residence: City	Madrid	State		Country	ES	Citizenship	ES
Address		Avda Campillo de San Isidro 49, Rivas Vaciamadrid					
Post Office Address		SAME AS ABOVE					
City	Madrid	State	ES	Postal Code	28529	Country	ES

Name of Additional Joint Inventor, if any:		<input type="checkbox"/> A Petition has been filed for this unsigned inventor					
Given Name	Timothy	Middle Name	Alan	Family Name	Shepherd	Suffix e.g. Jr.	
Inventor's Signature		<i>Timothy Alan Shepherd</i>				Date	05/02/03
Residence: City	Indianapolis	State	IN	Country	US	Citizenship	US
Address		8705 Country Woods Court					
Post Office Address		SAME AS ABOVE					
City	Indianapolis	State	IN	Zip	46217	Country	US

Name of Additional Joint Inventor, if any:		<input type="checkbox"/> A Petition has been filed for this unsigned inventor					
Given Name	James	Middle Name	Howard	Family Name	Wikel	Suffix e.g. Jr.	
Inventor's Signature		<i>James Howard Wikel</i>				Date	09/02/03
Residence: City	Greenwood	State	IN	Country	US	Citizenship	US
Address		4068 Sunshine Way					
Post Office Address		SAME AS ABOVE					
City	Greenwood	State	IN	Zip	46142	Country	US

# DECLARATION FOR UTILITY OR DESIGN PATENT APPLICATION

☒ Declaration Submitted with Initial Filing  
☐ Declaration Submitted after Initial Filing

Attorney Docket Number	X-13980
First Named Inventor	BONJOUKLIAN, Rosanne
COMPLETE IF KNOWN	
Application Number	
Filing Date	
Group Art Unit	
Examiner Name	

As a below named inventor, I hereby declare that:

My residence, post office address, and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

## KINASE INHIBITORS

the specification of which

☐ is attached hereto

OR

☒ was filed on (MM/DD/YYYY) July 31, 2003 as United States Application Number or PCT International

Application Number PCT/US03/19890 and was amended on (MM/DD/YYYY) (if applicable).

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment specifically referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in Title 37 Code of Federal Regulations, § 1.56.

I hereby claim foreign priority benefits under Title 35, United States Code § 119(a)-(d) or § 365(b) of any foreign application(s) for patent or inventor's certificate, or § 365(a) of any PCT international application which designated at least one country other than the United States of America, listed below and have also identified below, by checking the box, any foreign application for patent or inventor's certificate, or of any PCT international application having a filing date before that of the application on which priority is claimed.

Prior Foreign Application Number(s)	Country	Foreign Filing Date (MM/DD/YYYY)	Priority Not Claimed	Certified Copy Attached	
				YES	NO
02380178.0	GB	08/09/2002	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

☐ Additional foreign application numbers are listed on a supplemental priority sheet attached hereto:

I hereby claim the benefit under Title 35, United States Code § 119(e) of any United States provisional application(s) listed below.

Application Number(s)	Filing Date (MM/DD/YYYY)	<input type="checkbox"/> Additional provisional application numbers are listed on a supplemental priority sheet attached hereto.
60/421,939	10/26/2002	

**DECLARATION**

I hereby claim the benefit under Title 35, United States Code §120 of any United States application(s), or § 365(c) of any PCT international application designating the United States of America, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT international application in the manner provided by the first paragraph of Title 35, United States Code § 112, I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations § 1.56 which became available between the filing date of the prior application and the national or PCT international filing date of this application.

U.S. Parent Application Number	PCT Parent Number	Parent Filing Date (MM/DD/YYYY)	Parent Patent Number (if applicable)

☐ Additional U.S. or PCT international application numbers are listed on a supplemental priority sheet attached hereto.

As a named inventor, I hereby appoint the following registered practitioner(s) to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith:

Attorney Name	Reg. No.
Arvie J. Anderson	45,263
Lynn D. Apelgren	45,341
Robert A. Amitage	27,417
Brian P. Barrett	39,597
Michael T. Bates	34,121
Roger S. Benjamin	27,025
Gary M. Birch	48,881
William R. Boudreaux	35,796
Steven P. Caltrider	36,467
Paul R. Cantrell	36,470
John Cleveland	50,697
Charles E. Cohen	34,565
Donald L. Corneglio	30,741
Gregory A. Cox	47,504
Paula K. Davis	47,517
John C. Demeter	30,167
Manisha A. Desai	43,585
Paul J. Gaylo	36,808
Caren D. Geppert	P54,117
Francis O. Ginah	44,712
Amy E. Hamilton	33,894
Denica Hostattler	51,820
Thomas E. Jackson	33,064
Soonhee Jang	44,802
Gerald P. Keleher	43,707
James J. Kelley	41,888
Paul J. Kokkonen	31,533
Thomas LaGrandeur	51,026

Attorney Name	Reg. No.
Robert E. Lee	27,919
James P. Leeds	35,241
Nelsen L. Lentz	38,537
Elizabeth A. McGraw	44,646
Douglas K. Norman	33,267
Aileen Palmberg	40,422
Thomas G. Plant	35,784
Edward Prein	37,212
Grant E. Reed	41,264
James J. Sales	33,773
Michael J. Sayles	32,295
David M. Stemerick	40,187
Mark J. Stewart	43,936
Robert D. Titus	40,206
Robert C. Tucker	45,165
Tina M. Tucker	47,145
MaCharri Vorn dran-Jones	36,711
Gilbert T. Voy	43,972
Thomas D. Webster	39,872
Lawrence T. Welch	29,487
Alexander Wilson	45,782
Mark A. Winter	53,782
MaryAnn Wiskerchen	45,511
Dan L. Wood	48,613

☐ Additional registered practitioner(s) named on a supplemental sheet attached hereto.

Direct all correspondence to:

Name **ELI LILLY AND COMPANY**  
 Address **ATTN: Robert D. Titus**  
 Address **Patent Division, P.O. Box 6288**  
 City **INDIANAPOLIS** State **INDIANA** ZIP **46206-6288**  
 Country **US** Telephone **(317) 277-3729** Fax **(317) 276-3861**

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Name of Sole or First Inventor: ☐ A Petition has been filed for this unsigned inventor

Given Name **Rosanne** Middle Name  Family Name **Bonjouklian** Suffix e.g. Jr.

Inventor's Signature  Date

Residence: City **Zionsville** State **IN** Country **US** Citizenship **US**

Address **318 Dominion Drive**

Post Office Address **SAME AS ABOVE**

City **Zionsville** State **IN** Zip **46077** Country **US**

Additional inventors are being named on supplement sheet(s) attached hereto.

☒

**DECLARATION**

Name of Additional Joint Inventor, if any:		<input type="checkbox"/> A Petition has been filed for this unsigned inventor					
Given Name	Jose	Middle Name	Eugenio	Family Name	De Diego Gomez	Suffix e.g. Jr.	
Inventor's Signature						Date	16/09/2003
Residence: City	Madrid	State		Country	ES	Citizenship	ES
Address	C/Omega 42, 1°C						
Post Office Address	SAME AS ABOVE						
City	Madrid	State		Postal Code	28032	Country	ES

Name of Additional Joint Inventor, if any:		<input type="checkbox"/> A Petition has been filed for this unsigned inventor					
Given Name	Alfonso	Middle Name		Family Name	De Dios	Suffix e.g. Jr.	
Inventor's Signature						Date	Sept 23 <sup>rd</sup> 2003
Residence: City	Madrid	State		Country	ES	Citizenship	ES
Address	Bahia de Almeria 18B, 2A						
Post Office Address	SAME AS ABOVE						
City	Madrid	State		Postal Code	28042	Country	ES

Name of Additional Joint Inventor, if any:		<input type="checkbox"/> A Petition has been filed for this unsigned inventor					
Given Name	Chafiq	Middle Name	Hamdouchi	Family Name	Hamdouchi	Suffix e.g. Jr.	
Inventor's Signature						Date	
Residence: City	Carmel	State	IN	Country	US	Citizenship	ES
Address	14469 Twin Oaks						
Post Office Address	SAME AS ABOVE						
City	Carmel	State	IN	Zip	46032	Country	US

Name of Additional Joint Inventor, if any:		<input type="checkbox"/> A Petition has been filed for this unsigned inventor					
Given Name	Tiecho	Middle Name		Family Name	LI	Suffix e.g. Jr.	
Inventor's Signature						Date	
Residence: City	Fishers	State	IN	Country	US	Citizenship	CA
Address	12853 Turnham Drive						
Post Office Address	SAME AS ABOVE						
City	Fishers	State	IN	Zip	46038	Country	US

**DECLARATION**

Name of Additional Joint Inventor, if any:		<input type="checkbox"/> A Petition has been filed for this unsigned inventor					
Given Name	Beatriz	Middle Name	Lopez	Family Name	De Uralde Garmendia	Suffix e.g. Jr.	
Inventor's Signature	<i>Beatriz Lopez de Uralde</i>				Date	09/02/2003	
Residence: City	Madrid	State		Country	ES	Citizenship	ES
Address	Calle Gil de Santibañez 6, 4°						
Post Office Address	SAME AS ABOVE						
City	Madrid	State		Postal Code	28001	Country	ES

Name of Additional Joint Inventor, if any:		<input type="checkbox"/> A Petition has been filed for this unsigned inventor					
Given Name	Michal	Middle Name		Family Name	Vieth	Suffix e.g. Jr.	
Inventor's Signature					Date		
Residence: City	Carmel	State	IN	Country	US	Citizenship	US
Address	13436 Shakamac Drive						
Post Office Address	SAME AS ABOVE						
City	Carmel	State	IN	Zip	46032	Country	US

Name of Additional Joint Inventor, if any:		<input type="checkbox"/> A Petition has been filed for this unsigned inventor					
Given Name	Jeremy	Middle Name	Schulenberg	Family Name	York	Suffix e.g. Jr.	
Inventor's Signature					Date		
Residence: City	Indianapolis	State	IN	Country	US	Citizenship	US
Address	8866 Doral East Drive, Apartment F						
Post Office Address	SAME AS ABOVE						
City	Indianapolis	State	IN	Zip	46250	Country	US

Name of Additional Joint Inventor, if any:		<input type="checkbox"/> A Petition has been filed for this unsigned inventor					
Given Name	Robert	Middle Name	Dean	Family Name	Dally	Suffix e.g. Jr.	
Inventor's Signature					Date		
Residence: City	Indianapolis	State	IN	Country	US	Citizenship	US
Address	9656 Loganberry Lane						
Post Office Address	SAME AS ABOVE						
City	Indianapolis	State	IN	Zip	46256	Country	US

## DECLARATION

Name of Additional Joint Inventor, if any:		<input type="checkbox"/> A Petition has been filed for this unsigned inventor					
Given Name	Miriam	Middle Name	Filadelfa	Family Name	Del Prado Catalina	Suffix e.g. Jr.	
Inventor's Signature					Date	09/02/2003	
Residence: City	Madrid	State		Country	ES	Citizenship	ES
Address	C/Antracita no 26 3ª						
Post Office Address	SAME AS ABOVE						
City	Madrid	State		Postal Code	28045	Country	ES

Name of Additional Joint Inventor, if any:		<input type="checkbox"/> A Petition has been filed for this unsigned inventor					
Given Name	Carlos	Middle Name		Family Name	Jaramillo Aguado	Suffix e.g. Jr.	
Inventor's Signature					Date	09/02/2003	
Residence: City	Madrid	State		Country	ES	Citizenship	ES
Address	C/Arturo Soria 321						
Post Office Address	SAME AS ABOVE						
City	Madrid	State	ES	Postal Code	28033	Country	ES

Name of Additional Joint Inventor, if any:		<input type="checkbox"/> A Petition has been filed for this unsigned inventor					
Given Name	Luisa	Middle Name	Maria	Family Name	Martin-Cabrejas	Suffix e.g. Jr.	
Inventor's Signature					Date	09/02/2003	
Residence: City	Madrid	State		Country	ES	Citizenship	ES
Address	Alejo Carpentier 17, 2ªC, Alcalá de Henares						
Post Office Address	SAME AS ABOVE						
City	Madrid	State		Postal Code	28806	Country	ES

Name of Additional Joint Inventor, if any:		<input type="checkbox"/> A Petition has been filed for this unsigned inventor					
Given Name	Carlos	Middle Name		Family Name	Montero Salgado	Suffix e.g. Jr.	
Inventor's Signature					Date	09/02/2003	
Residence: City	Madrid	State		Country	ES	Citizenship	ES
Address	San Roque 19, 1ªD, Majadahonda						
Post Office Address	SAME AS ABOVE						
City	Madrid	State		Postal Code	28220	Country	ES

## DECLARATION

Name of Additional  
Joint Inventor, if any:☐

A Petition has been filed for this unsigned inventor

Given Name	Sheila	Middle Name		Family Name	Pleite Selgas	Suffix e.g. Jr.	
Inventor's Signature						Date	09/10/2003
Residence: City	Madrid	State		Country	ES	Citizenship	ES
Address	Avda Reina Victoria N°68 1ª esc, 5ºB						
Post Office Address	SAME AS ABOVE						
City	Madrid	State		Postal Code	28003	Country	ES

Name of Additional Joint  
Inventor, if any:☐

A Petition has been filed for this unsigned inventor

Given Name	Concepcion	Middle Name		Family Name	Sanchez-Martinez	Suffix e.g. Jr.	
Inventor's Signature						Date	09-02-2003
Residence: City	Madrid	State		Country	ES	Citizenship	ES
Address	Avda Campillo de San Isidro 49, Rivas Vaciamadrid						
Post Office Address	SAME AS ABOVE						
City	Madrid	State	ES	Postal Code	28529	Country	ES

Name of Additional Joint  
Inventor, if any:☐

A Petition has been filed for this unsigned inventor

Given Name	Timothy	Middle Name	Alan	Family Name	Shepherd	Suffix e.g. Jr.	
Inventor's Signature						Date	
Residence: City	Indianapolis	State	IN	Country	US	Citizenship	US
Address	8705 Country Woods Court						
Post Office Address	SAME AS ABOVE						
City	Indianapolis	State	IN	Zip	46217	Country	US

Name of Additional  
Joint Inventor, if any:☐

A Petition has been filed for this unsigned inventor

Given Name	James	Middle Name	Howard	Family Name	Wikel	Suffix e.g. Jr.	
Inventor's Signature						Date	
Residence: City	Greenwood	State	IN	Country	US	Citizenship	US
Address	4068 Sunshine Way						
Post Office Address	SAME AS ABOVE						
City	Greenwood	State	IN	Zip	46142	Country	US

Date: 30 JULY 2003

**PCT INTERNATIONAL APPLICATION COVER LETTER**

Regarding the International Application of:

Docket or Reference Number: **Docket No. X-13980**

Applicant(s): **ELI LILLY AND COMPANY, BONJOUKLIAN, Rosanne, et. al.**

Entitled: **KINASE INHIBITORS**

**To the United States Receiving Office (RO/US):**

Accompanying this cover letter is the above-identified International application, including a completed Request form PCT/RO/101 and Fee Sheet. Please process the application according to the provisions of the Patent Cooperation Treaty.

The following requests are made of the RO/US:

**1. ☒ PREPARATION AND TRANSMITTAL OF CERTIFIED COPY OF PRIORITY DOCUMENTS**

Please prepare and transmit to the International Bureau a certified copy of the United States origin priority documents identified in Box VI of the Request form (37 CFR 1.19 I.451).

To cover the cost of copy preparation and certification (37 CFR 1.19(a)(3) and (b)(1)).

☐ a (check) (money order) in the amount of \$\_\_\_\_\_ is attached to this transmittal letter.

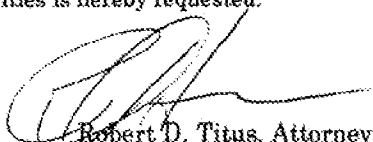
☒ the RO/US is hereby authorized to charge the following deposit account no.: **05-0840**

The appropriate Search fee for the above-named Authority is indicated on the Fee Calculation Sheet (PCT/RO/101 Annex).

**2. ☐ SUPPLEMENTAL SEARCH FEES (ONLY WHEN ISA/US CONDUCTS THE INTERNATIONAL SEARCH -- Please charge any Supplemental Search fees that may be required by the United States International Searching Authority (ISA/US) to deposit account no.: **05-0840****

**NOTE: SUPPLEMENTAL SEARCH FEES FOR ISA/EP ARE PAYABLE DIRECTLY TO THE EUROPEAN PATENT OFFICE**

**3. ☐ REQUEST FOR FOREIGN TRANSMITTAL LICENSE -- According to the provisions of 35 U.S.C. 184 and 37CFR 5.11, a license to transmit the accompanying International application to foreign agencies or authorities is hereby requested.**

  
Robert D. Titus, Attorney  
Reg. No. 40,206

## PCT REQUEST

X-13980

Original (for SUBMISSION) - printed on 30.07.2003 02:29:23 PM

<b>0</b>	<b>For receiving Office use only</b>	
<b>0-1</b>	International Application No.	
<b>0-2</b>	International Filing Date	
<b>0-3</b>	Name of receiving Office and "PCT International Application"	
<b>0-4</b>	Form - PCT/RO/101 PCT Request	
<b>0-4-1</b>	Prepared using	<b>PCT-EASY Version 2.92 (updated 01.07.2003)</b>
<b>0-5</b>	<b>Petition</b> The undersigned requests that the present international application be processed according to the Patent Cooperation Treaty	
<b>0-6</b>	Receiving Office (specified by the applicant)	<b>United States Patent and Trademark Office (USPTO) (RO/US)</b>
<b>0-7</b>	Applicant's or agent's file reference	<b>X-13980</b>
<b>I</b>	<b>Title of invention</b>	<b>KINASE INHIBITORS</b>
<b>II</b>	<b>Applicant</b>	
<b>II-1</b>	This person is:	<b>applicant only</b>
<b>II-2</b>	Applicant for	<b>all designated States except US</b>
<b>II-4</b>	Name	<b>ELI LILLY AND COMPANY</b>
<b>II-5</b>	Address:	<b>Lilly Corporate Center Indianapolis, IN 46285 United States of America</b>
<b>II-6</b>	State of nationality	<b>US</b>
<b>II-7</b>	State of residence	<b>US</b>
<b>II-8</b>	Telephone No.	<b>317.277.3729</b>
<b>II-9</b>	Facsimile No.	<b>317.276.3861</b>
<b>III-1</b>	<b>Applicant and/or inventor</b>	
<b>III-1-1</b>	This person is:	<b>applicant and inventor</b>
<b>III-1-2</b>	Applicant for	<b>US only</b>
<b>III-1-4</b>	Name (LAST, First)	<b>BONJOUKLIAN, Rosanne</b>
<b>III-1-5</b>	Address:	<b>318 Dominion Drive Zionsville, IN 46077 United States of America</b>
<b>III-1-6</b>	State of nationality	<b>US</b>
<b>III-1-7</b>	State of residence	<b>US</b>

## PATENT COOPERATION TREATY

RECEIVED

NOV 13 2003

From the INTERNATIONAL SEARCHING AUTHORITY

PCT

ELI LILLY &amp; COMPANY

NOTIFICATION OF TRANSMITTAL OF  
THE INTERNATIONAL SEARCH REPORT  
OR THE DECLARATION

To:  
ELI LILLY AND COMPANY  
Attn. Titus, Robert D. ✓  
P.O. Box 6288  
Indianapolis, IN 46206-6288  
UNITED STATES OF AMERICA

(PCT Rule 44.1)

7 DE 2003

Date of mailing  
(day/month/year) 07/11/2003

Applicant's or agent's file reference

X-13980 ✓

FOR FURTHER ACTION

See paragraphs 1 and 4 below

International application No.

PCT/US 03/19890 ✓

International filing date  
(day/month/year)

31/07/2003 ✓

Applicant

ELI LILLY AND COMPANY

1. ☒ The applicant is hereby notified that the International Search Report has been established and is transmitted herewith.

**Filing of amendments and statement under Article 19:**

The applicant is entitled, if he so wishes, to amend the claims of the international Application (see Rule 46):

**When?** The time limit for filing such amendments is normally 2 months from the date of transmittal of the International Search Report; however, for more details, see the notes on the accompanying sheet.

**Where?** Directly to the International Bureau of WIPO  
34, chemin des Colombettes  
1211 Geneva 20, Switzerland  
Facsimile No.: (41-22) 740.14.35

For more detailed instructions, see the notes on the accompanying sheet.

2. ☐ The applicant is hereby notified that no International Search Report will be established and that the declaration under Article 17(2)(a) to that effect is transmitted herewith.

3. ☐ With regard to the protest against payment of (an) additional fee(s) under Rule 40.2, the applicant is notified that:

☐ the protest together with the decision thereon has been transmitted to the International Bureau together with the applicant's request to forward the texts of both the protest and the decision thereon to the designated Offices.

☐ no decision has been made yet on the protest; the applicant will be notified as soon as a decision is made.

4. **Further action(s):** The applicant is reminded of the following:

Shortly after **18 months** from the priority date, the international application will be published by the International Bureau. If the applicant wishes to avoid or postpone publication, a notice of withdrawal of the international application, or of the priority claim, must reach the International Bureau as provided in Rules 90bis.1 and 90bis.3, respectively, before the completion of the technical preparations for international publication.

Within **19 months** from the priority date, a demand for international preliminary examination must be filed if the applicant wishes to postpone the entry into the national phase until 30 months from the priority date (in some Offices even later).

Within **20 months** from the priority date, the applicant must perform the prescribed acts for entry into the national phase before all designated Offices which have not been elected in the demand or in a later election within 19 months from the priority date or could not be elected because they are not bound by Chapter II.

Name and mailing address of the International Searching Authority



European Patent Office, P.B. 5818 Patentlaan 2  
NL-2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax: (+31-70) 340-3016

Authorized officer

Stefan Brell

## NOTES TO FORM PCT/ISA/220

These Notes are intended to give the basic instructions concerning the filing of amendments under article 19. The Notes are based on the requirements of the Patent Cooperation Treaty, the Regulations and the Administrative Instructions under that Treaty. In case of discrepancy between these Notes and those requirements, the latter are applicable. For more detailed information, see also the PCT Applicant's Guide, a publication of WIPO.

In these Notes, "Article", "Rule", and "Section" refer to the provisions of the PCT, the PCT Regulations and the PCT Administrative Instructions respectively.

### INSTRUCTIONS CONCERNING AMENDMENTS UNDER ARTICLE 19

The applicant has, after having received the international search report, one opportunity to amend the claims of the international application. It should however be emphasized that, since all parts of the international application (claims, description and drawings) may be amended during the international preliminary examination procedure, there is usually no need to file amendments of the claims under Article 19 except where, e.g. the applicant wants the latter to be published for the purposes of provisional protection or has another reason for amending the claims before international publication. Furthermore, it should be emphasized that provisional protection is available in some States only.

#### What parts of the international application may be amended?

Under Article 19, only the claims may be amended.

During the international phase, the claims may also be amended (or further amended) under Article 34 before the International Preliminary Examining Authority. The description and drawings may only be amended under Article 34 before the International Examining Authority.

Upon entry into the national phase, all parts of the international application may be amended under Article 28 or, where applicable, Article 41.

#### When?

Within 2 months from the date of transmittal of the international search report or 16 months from the priority date, whichever time limit expires later. It should be noted, however, that the amendments will be considered as having been received on time if they are received by the International Bureau after the expiration of the applicable time limit but before the completion of the technical preparations for international publication (Rule 46.1).

#### Where not to file the amendments?

The amendments may only be filed with the International Bureau and not with the receiving Office or the International Searching Authority (Rule 46.2).

Where a demand for international preliminary examination has been/is filed, see below.

#### How?

Either by cancelling one or more entire claims, by adding one or more new claims or by amending the text of one or more of the claims as filed.

A replacement sheet must be submitted for each sheet of the claims which, on account of an amendment or amendments, differs from the sheet originally filed.

All the claims appearing on a replacement sheet must be numbered in Arabic numerals. Where a claim is cancelled, no renumbering of the other claims is required. In all cases where claims are renumbered, they must be renumbered consecutively (Administrative Instructions, Section 205(b)).

The amendments must be made in the language in which the international application is to be published.

#### What documents must/may accompany the amendments?

##### Letter (Section 205(b)):

The amendments must be submitted with a letter.

The letter will not be published with the international application and the amended claims. It should not be confused with the "Statement under Article 19(1)" (see below, under "Statement under Article 19(1)").

The letter must be in English or French, at the choice of the applicant. However, if the language of the international application is English, the letter must be in English; if the language of the international application is French, the letter must be in French.

## NOTES TO FORM PCT/ISA/220 (continued)

The letter must indicate the differences between the claims as filed and the claims as amended. It must, in particular, indicate, in connection with each claim appearing in the international application (it being understood that identical indications concerning several claims may be grouped), whether

- (i) the claim is unchanged;
- (ii) the claim is cancelled;
- (iii) the claim is new;
- (iv) the claim replaces one or more claims as filed;
- (v) the claim is the result of the division of a claim as filed.

The following examples illustrate the manner in which amendments must be explained in the accompanying letter:

1. [Where originally there were 48 claims and after amendment of some claims there are 51]:  
"Claims 1 to 29, 31, 32, 34, 35, 37 to 48 replaced by amended claims bearing the same numbers; claims 30, 33 and 36 unchanged; new claims 49 to 51 added."
2. [Where originally there were 15 claims and after amendment of all claims there are 11]:  
"Claims 1 to 15 replaced by amended claims 1 to 11."
3. [Where originally there were 14 claims and the amendments consist in cancelling some claims and in adding new claims]:  
"Claims 1 to 6 and 14 unchanged; claims 7 to 13 cancelled; new claims 15, 16 and 17 added." or  
"Claims 7 to 13 cancelled; new claims 15, 16 and 17 added; all other claims unchanged."
4. [Where various kinds of amendments are made]:  
"Claims 1-10 unchanged; claims 11 to 13, 18 and 19 cancelled; claims 14, 15 and 16 replaced by amended claim 14; claim 17 subdivided into amended claims 15, 16 and 17; new claims 20 and 21 added."

### "Statement under article 19(1)" (Rule 48.4)

The amendments may be accompanied by a statement explaining the amendments and indicating any impact that such amendments might have on the description and the drawings (which cannot be amended under Article 19(1)).

The statement will be published with the international application and the amended claims.

**It must be in the language in which the international application is to be published.**

It must be brief, not exceeding 500 words if in English or if translated into English.

It should not be confused with and does not replace the letter indicating the differences between the claims as filed and as amended. It must be filed on a separate sheet and must be identified as such by a heading, preferably by using the words "Statement under Article 19(1)."

It may not contain any disparaging comments on the international search report or the relevance of citations contained in that report. Reference to citations, relevant to a given claim, contained in the international search report may be made only in connection with an amendment of that claim.

### Consequence if a demand for international preliminary examination has already been filed

If, at the time of filing any amendments under Article 19, a demand for international preliminary examination has already been submitted, the applicant must preferably, at the same time of filing the amendments with the International Bureau, also file a copy of such amendments with the International Preliminary Examining Authority (see Rule 62.2(a), first sentence).

### Consequence with regard to translation of the international application for entry into the national phase

The applicant's attention is drawn to the fact that, where upon entry into the national phase, a translation of the claims as amended under Article 19 may have to be furnished to the designated/elected Offices, instead of, or in addition to, the translation of the claims as filed.

For further details on the requirements of each designated/elected Office, see Volume II of the PCT Applicant's Guide.

## PATENT COOPERATION TREATY

## PCT

## INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference <b>X-13980</b>	<b>FOR FURTHER ACTION</b> see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.	
International application No. <b>PCT/US 03/ 19890</b>	International filing date (day/month/year) <b>31/07/2003</b>	(Earliest) Priority Date (day/month/year) <b>09/08/2002</b>
Applicant  <b>ELI LILLY AND COMPANY</b>		

This international Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This international Search Report consists of a total of 6 sheets.  
☒ It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

b. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international search was carried out on the basis of the sequence listing:

☐ contained in the international application in written form.

☐ filed together with the international application in computer readable form.

☐ furnished subsequently to this Authority in written form.

☐ furnished subsequently to this Authority in computer readable form.

☐ the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.

☐ the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

2. ☒ **Certain claims were found unsearchable** (See Box I).

3. ☐ **Unity of invention is lacking** (see Box II).

4. With regard to the **title**,

☐ the text is approved as submitted by the applicant.

☒ the text has been established by this Authority to read as follows:  
**BENZIMIDAZOLES AND BENZOTHAZOLES AS INHIBITORS OF MAP KINASE**

5. With regard to the **abstract**,

☐ the text is approved as submitted by the applicant.

☒ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the **drawings** to be published with the abstract is Figure No. \_\_\_\_\_

☐ as suggested by the applicant.

☐ because the applicant failed to suggest a figure.

☐ because this figure better characterizes the invention.

☒ None of the figures.

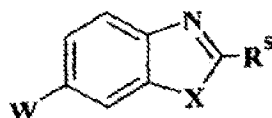
# INTERNATIONAL SEARCH REPORT

International application No.

PCT/US 03/19890

Box III TEXT OF THE ABSTRACT (Continuation of item 5 of the first sheet)

The present invention provides kinase inhibitors of Formula I:



I

wherein W represents inter alia imidazol, oxazol, pyrazol, thiazol as triazol, which are substituted by phenyl or thienyl.

The disclosed compounds inhibit p-38 kinase and are useful in the treatment of metastasis or rheumatoid arthritis.

PCT/US 03/19890

IPC 7	C07D409/14	C07D403/04	C07D401/14	C07D405/14	C07D403/14
	C07D413/14	C07D471/04	C07D487/04	C07D409/04	C07D417/04
	A61K31/41	A61P35/04			

B. FIELDS SEARCHED

IPC 7 C07D A61K

EPO-Internal, WPI Data, CHEM ABS Data

P,Y	WO 02 072576 A (LETAVIC MICHAEL ANTHONY ;MCCLURE KIM FRANCIS (US); PFIZER PROD INC) 19 September 2002 (2002-09-19) claims 1,13,14	1-23
Y	WO 96 40143 A (ADAMS JERRY LEROY ;BOEHM JEFFREY CHARLES (US); GALLAGHER TIMOTHY F) 19 December 1996 (1996-12-19) claims 1,22,23	1-23
Y	WO 97 25045 A (SMITHKLINE BEECHAM CORP ;ADAMS JERRY L (US); BOEHM JEFFREY C (US);) 17 July 1997 (1997-07-17) claims 1,16,17	1-23

— / —

☒ Patent family members are listed in annex.

'&' document member of the same patent family

07/11/2003

Wörth, C

## INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 03/19890

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No
Y	WO 00 10563 A (SMITHKLINE BEECHAM CORP ;ADAMS JERRY L (US); LEE DENNIS (US)) 2 March 2000 (2000-03-02) claims 1,22,23 -----	1-23
A	REVESZ L ET AL: "SAR of 4-Hydroxypiperidine and Hydroxyalkyl Substituted Heterocycles as Novel p38 MAP Kinase Inhibitors" BIOORGANIC & MEDICINAL CHEMISTRY LETTERS, OXFORD, GB, vol. 10, 2000, pages 1261-1264, XP002203507 ISSN: 0960-894X the whole document -----	1-23

# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/US 03/19890

## Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:  
  
Although claims 18-23 are directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.
2. ☐ Claims Nos.:  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

### Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 03/19890

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 02072576	A	19-09-2002	WO 02072576 A1	19-09-2002
			US 2003092749 A1	15-05-2003
WO 9640143	A	19-12-1996	AT 233561 T	15-03-2003
			AU 699646 B2	10-12-1998
			AU 6272696 A	30-12-1996
			BR 9608591 A	05-01-1999
			CA 2223533 A1	19-12-1996
			CN 1192147 A	02-09-1998
			CZ 9703925 A3	16-09-1998
			DE 69626513 D1	10-04-2003
			EP 1314728 A1	28-05-2003
			EP 0831830 A1	01-04-1998
			HU 9802259 A2	28-09-1999
			IL 118544 A	08-08-2001
			JP 11513017 T	09-11-1999
			NO 975716 A	04-02-1998
			NZ 311403 A	29-11-1999
			PL 323916 A1	27-04-1998
			TR 9701574 T2	21-09-1999
			TW 442481 B	23-06-2001
			US 5869660 A	09-02-1999
			WO 9640143 A1	19-12-1996
			US 6369068 B1	09-04-2002
			US 5658903 A	19-08-1997
			US 5739143 A	14-04-1998
			US 6218537 B1	17-04-2001
			ZA 9604723 A	17-06-1997
WO 9725045	A	17-07-1997	AT 247470 T	15-09-2003
			AU 715900 B2	10-02-2000
			AU 1577497 A	01-08-1997
			BR 9706973 A	06-04-1999
			CA 2242327 A1	17-07-1997
			CN 1213306 A	07-04-1999
			CZ 9802164 A3	11-08-1999
			DE 69724246 D1	25-09-2003
			EP 0900083 A1	10-03-1999
			HU 9902460 A2	29-11-1999
			JP 2000503302 T	21-03-2000
			NO 983189 A	10-09-1998
			NZ 327044 A	28-01-2000
			PL 327735 A1	21-12-1998
			TR 9801361 T2	21-10-1998
			TW 505637 B	11-10-2002
			US 5864036 A	26-01-1999
			WO 9725045 A1	17-07-1997
			US 5977103 A	02-11-1999
			US 6046208 A	04-04-2000
			US 5756499 A	26-05-1998
			ZA 9700174 A	03-02-1998
WO 0010563	A	02-03-2000	CA 2341370 A1	02-03-2000
			EP 1112070 A1	04-07-2001
			JP 2003525201 T	26-08-2003
			WO 0010563 A1	02-03-2000
			US 6599910 B1	29-07-2003

between an intermediate of unknown structure and a final product of unknown structure. In order to satisfy unity in such cases, there must be sufficient evidence to lead one to conclude that the intermediate and final products are technically closely interrelated as, for example, when the intermediate contains the same essential element as the final product or incorporates an essential element into the final product.

(d) It is possible in a single international application to accept different intermediate products used in different processes for the preparation of the final product, provided that they have the same essential structural element.

(e) The intermediate and final products must not be separated, in the process leading from one to the other, by an intermediate that is not new.

(f) If the same international application claims different intermediates for different structural parts of the final product, unity is not regarded as being present between the intermediates.

(g) If the intermediate and final products are families of compounds, each intermediate compound must correspond to a compound claimed in the family of the final products. However, some of the final products may have no corresponding compound in the family of the intermediate products so that the two families need not be absolutely congruent.

*AI Annex B, Part 1(h)*

10.19 As long as unity of invention can be recognized applying the above interpretations, the fact that, besides the ability to be used to produce final products, the intermediates also exhibit other possible effects or activities should not affect the decision on unity of invention.

### **Examples Concerning Unity of Invention**

10.20 The application of the principles of unity of invention is illustrated by the following examples for guidance in particular cases.

#### *Claims in Different Categories*

##### 10.21 *Example 1*

*Claim 1: A method of manufacturing chemical substance X.*

*Claim 2: Substance X.*

*Claim 3: The (method of) use of substance X as an insecticide.*

Unity exists between claims 1, 2 and 3. The special technical feature common to all the claims is substance X. However, if substance X is known in the art, unity would be lacking because there would not be a special technical feature common to all the claims.

##### 10.22 *Example 2*

*Claim 1: A process of manufacture comprising steps A and B.*

*Claim 2: Apparatus specifically designed for carrying out step A.*

*Claim 3: Apparatus specifically designed for carrying out step B.*

Unity exists between claims 1 and 2 or between claims 1 and 3. There is no unity between claims 2 and 3 since there exists no common special technical feature between the two claims.

##### 10.23 *Example 3*

*Claim 1: A process for painting an article in which the paint contains a new rust inhibiting substance X including the steps of atomizing the paint using*